Pioneering for You

Product brochure

Wilo split case pump,
the easy-maintenance one.

International Exhibition Centers (NCIEC), Beijing, China

Moving water efficiently
with reliable solutions for high flow.

Wherever high flow rates are required Wilo split case pumps are the best choice – and that in many respects!

The special features of the Wilo-SCP are the high efficiency and the low NPSH-values. The design guarantees a reliable operation at any time, even under extreme loads.

Thanks to the wide range of motor designs and special materials it is suitable for various applications.

IE3 motor technology provides for the required energy efficiency and cost savings. The exclusive Ceram coating promises still more efficiency.

Tailor-made for your requirements

- In heating, air-conditioning and cooling applications for air-conditioning systems and large district heating systems
- In municipal applications for pressure boosting tasks and transporting potable water
- In the industrial sector for cooling water applications such as cooling towers and water supply
- For process support in power plants, in the crude oil, automotive, metal and food industries, in the pharmaceutical sector as well as in pulp/paper processing and fertiliser production
- As a pressure boosting system for fire extinguishing applications that is installed on a frame either in a fixed or mobile manner

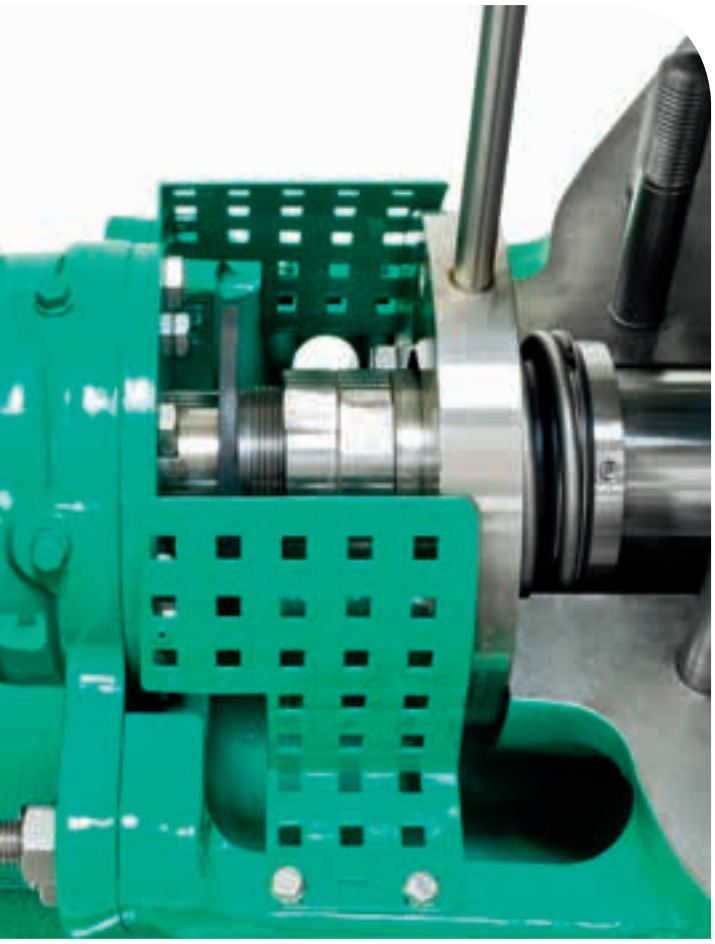
Reliable water supply
thanks to high-quality components.

Reliable
All Wilo-SCP's are delivered with a mechanical shaft seal (carbon/silicon-carbide and EPDM elastomer) and a shaft sleeve. Consequently an operation of the pumps at 120 °C is possible without external cooling. Alternatively a design with stuffing boxes is also available.

Low in vibration
The pumps are all equipped with shaft protection sleeves and slide bearings. This protects and additionally stabilises the shaft, thereby ensuring low vibration operation and long service lives.

The SCP series with the configuration type R is the first pump on the market which corresponds to the European RoHS* Directive. As an option Wilo split case pumps are available with energy-efficient IE3 motors. Another advantage is the innovative Ceram CT coating. It provides for a higher hydraulic efficiency and a longer service life.

Thanks to high-quality materials and sealing systems the Wilo-SCP convinces with highest operation reliability. The Wilo-SCP is available with a standard hydraulic as well as in a double-stage design or in a double-volute design. Regarding maintenance friendliness the SCP can also score. The upper casing part can be easily removed. So you get direct access to all rotating parts without having to dismantle the discharge or suction pipe or the drive.



Low-wearing
The bearing bracket integrated in the main housing, the rigid shaft and the spring-pretensioned bearing all minimise wear on bearings, seals and couplings.

The advantages to you

- → Energy-efficient thanks to optional IE3 motor technology
- → Trendsetting thanks to RoHS conformity
- → Low NPSH value thanks to a dual flow impeller
- → Longer running time thanks to the perfectly distributed bearing load
- → Low wear due to application-oriented material combinations
- → Easy maintenance without removing the pressure or suction lines
- → Additional energy savings due to Ceram CT impeller coating
- → High flow rates up to 17,000 m^3/h available as special version

* RoHS: Restriction of Hazardous Substances

Wilo split case pumps.
The advantages to you at a glance.

Energy costs savings thanks to exclusive Wilo Ceram CT coating. Parts coated with Ceram CT have high abrasion resistance and lower surface roughness, which in most cases increases the hydromechanical efficiency of the pump and saves energy costs. The following example shows how much can be saved with the Ceram CT impeller coating.

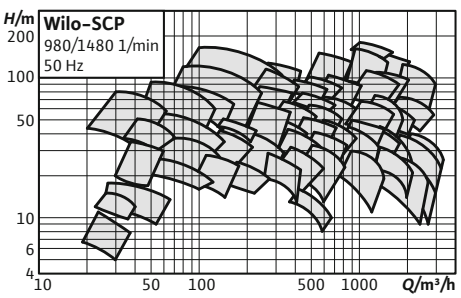
Wilo-SCP 200-360HA	without Ceram CT coating	with Ceram CT coating
Delivery head	31 m	31 m
Volume flow	184 l/s	184 l/s
Pump efficiency	86.9 %	89.2 %
Motor efficiency	95.6 %	95.6 %
Overall efficiency	83.1 %	85.3 %
Power consumption	67.4 kW	65.7 kW

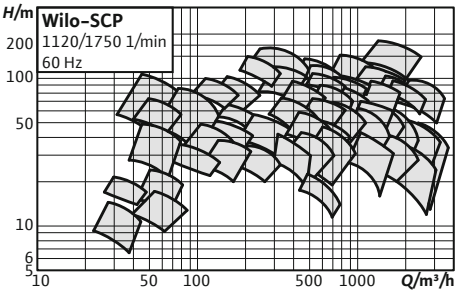
Calculation: Energy cost savings with Ceram CT coating		
Difference in power consumption	67.4 kW – 65.7 kW	1.7 kW
Annual operating time	365 days × 20 h	7,300 h
Energy costs	0.15 €/kWh	
Total energy cost savings per year	7,300 h × 0.15 €/kWh × 1.7 kW	€ 1,862
Updating costs	€ 800	
Amortisation time	157 days	
Overall cost savings*	€ 1,862 × 10 years	€ 18,620

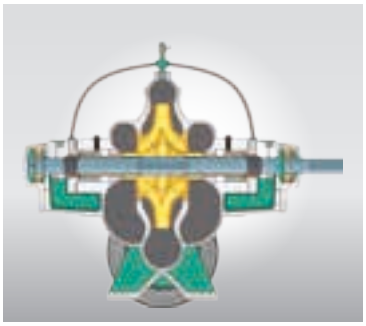
* Energy costs calculated at a constant rate of 0.15 €/kWh.

Technical data

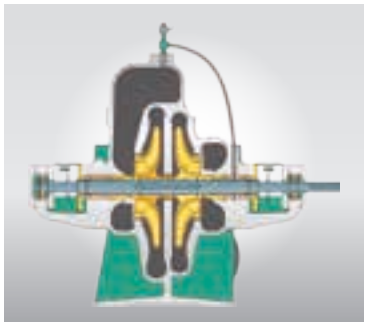
Large selection:
58 types for 50 Hz and 64 types for 60 Hz







Standard hydraulic design (HA/HB)
The hydraulic system is optimised to achieve maximum efficiency. The impeller has a double suction effect to reduce the axial thrust.



Double-stage design (DS)
This design reaches a high pressure at the outlet. The impellers are both placed back to back in the pump housing to balance the axial thrust.

Double-volute design (DV)
In the case of large impellers, the housing has a double volute to minimise radial thrust on the shaft.

Approved fluids (other fluids on request)	
Heating water (in accordance with VDI 2035)	•
Potable water (ACS certificate available)	•
Cooling and cold water	•
Water-glycol mixtures (for 20–40 vol. % glycol and fluid temperature ≤ 40 °C)	•

Approved field of application	
Fluid temperature – mechanical seal T	-8...+120 °C
Fluid temperature – stuffing box packing T	-8...+105 °C
Ambient temperature for standard motor	40 °C
Nominal connection diameters DN	On suction side: 65–500 On pressure side: 50–400 (larger nominal diameters on request)

Motor/Electronics	
IEC standard motor	•
Protection class	IP 55
Insulation class	F
PTC thermistor sensor	•
Motor protection required on site	–
Motor winding up to 3 kW	230 V Δ/400 V Y, 50 Hz
Motor winding from 4 kW	400 V Δ/690 V Y, 50 Hz
Other voltages/frequencies	Special version on request
Speed of 6-pole motors n	980 rpm
Speed of 4-pole motors n	1480 rpm
Speed of 2-pole motors n	2980 rpm
Speed control	Wilo control devices, external frequency converter (on request)

Materials (RoHS conform)

		American standard
Pump housing	EN-GJL-250	A48 class 35
Pump housing (special version)	Ni-resist cast iron GGL-NiCr202/X6CrNiMo1810	Ni-resist BS 3468 Gr 2/BS 2789 500.1
Impeller (standard)	G-CuSn10	B 427 C 90700
Impeller (special version)	EN-GJL-250/X6CrNiMo1810	A48 class 35/BS 84 C83 600
Wear rings	G-CuSn10	B 427 C 90700
Pump shaft	X12cr13	A276 type 410
Pump shaft (special version)	X5CrNiMo1810	BS 970 316 S16
Mechanical seal	Carbon/silicon carbide/EPDM (E1)	Carbon/silicon carbide/EPDM (E1)
Other mechanical seals	Stuffing box packing	Stuffing box packing

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